Comparisons of Job Characteristics

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and

Tenders (51-4122)

Compare Knowledge
Compare Skills
Compare Abilities
Compare Detailed Work Activities
Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

82

Knowledge

Similarity of Focus Occupation to Associated Occupation: 67

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Mechanical	6.8	12.2	13.5	Current knowledge level is likely sufficient	
Production and Processing	6.0	11.6	13.2	Current knowledge level is likely sufficient	
Public Safety and Security	6.9	8.0	8.9	Current knowledge level is likely sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation:

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Operation Monitoring	6.6	9.6	10.2	0	Current skill level may be sufficient
Operation and Control	5.4	8.6	10.8	>	Skill level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 58

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Manual Dexterity	6.5	9.7	13.5	>>	Current ability level is likely more than sufficient
Control Precision	6.6	9.6	13.4	>>	Current ability level is likely more than sufficient
Finger Dexterity	7.6	9.6	12.0	>	Current ability level is likely sufficient
Auditory Attention	5.9	7.9	11.6	>>	Current ability level is likely more than sufficient
Extent Flexibility	4.8	7.9	12.1	>>	Current ability level is likely more than sufficient
Reaction Time	4.8	7.3	12.3	>>	Current ability level is likely more than sufficient
Rate Control	3.8	7.2	10.6	>>	Current ability level is likely more than sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 71

Focus Occupation: Structural Iron and Steel Workers (47-2221)
Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Work Activities	Exclusivity of Activity
Fabricate, assemble, or disassemble manufactured products by hand	11
Move or fit heavy objects	8
Operate hoist, winch, or hydraulic boom	34
Read blueprints	10
Read specifications	23
Recognize characteristics of metals	62
Use acetylene welding/cutting torch	54
Use hand or power tools	2
Use precision measuring tools or equipment	17
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 82

Focus Occupation: Structural Iron and Steel Workers (47-2221)

Associated Occupation: Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders (51-4122)

Tools and Technologies	Exclusivity
Computers	1

Cutting and crimping and punching tools	3
Face and head protection	7
Forming tools	2
Holding and clamping tools	3
Industry specific software	1
Lifting equipment and accessories	3
Measuring and layout tools	3
Power tools	2
Rough and finishing tools	5
Safety apparel	4
Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Vision protection and accessories	3

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.